

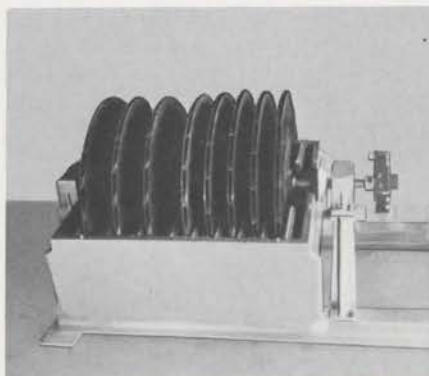


## A FEW THOUGHTS ON BLOWERS

By Chris Feiereisen

*The ancients had the need of unfailling sources of wind to power their ships, and looked to their mythology; the modern pipe organ enthusiast gets results by being kind to his "Orgblo."*

Most theatre organ blowers which have been moved recently have bad bearings. Reasons for this are easy to understand. In ball bearings, otherwise known as frictionless bearings, the only purpose of the grease is to keep the polished surfaces from rusting. It is unlikely that the grease film on the bearings would remain intact through perhaps thirty years of non-use. It is also likely that dirt will filter into bearings during that time (or during moving operations). Kept clean, ball bearings will last almost forever, but once dirt or rust gets into them they soon destroy themselves.

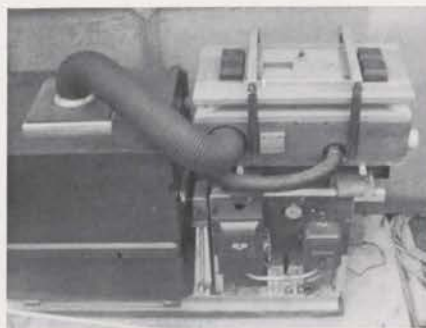


Kinetic blower with top removed, showing rotary fan blades. The bearings referred to in the text are in the supporting beams at both ends of the fan axle.

Sleeve bearings should be cleaned also, whether on motor or generator. These bearings require a constant film of oil because it is actually on the oil that the shaft rides. In time oil tends to thicken and to clog the small channels through which it must travel to saturate the sleeve. Without oil there is metal-to-metal contact and the bearing soon wears or locks.

One troublesome aspect is the absence of danger signals; a blower may sound and perform perfectly even when

the bearings are on the way out. By the time it starts to heat or rumble, the ball bearings are slipping on the motor shaft or its housing, causing expensive damage to them. Of course, if this situation is left unattended, the motor will soon burn out. How much better to forestall this possibility by replacing ball bearings (or have sleeve bearings cleaned) before a long unused or recently moved organ is put into service again. Although this may sound drastic to some, I had to learn the hard way. The end result of skipping this precaution was expensive motor trouble each time I tried to tell myself it wasn't necessary. New bearings are far less expensive than motor repairs. Once carefully replaced, the motor should give many years of trouble-free service.



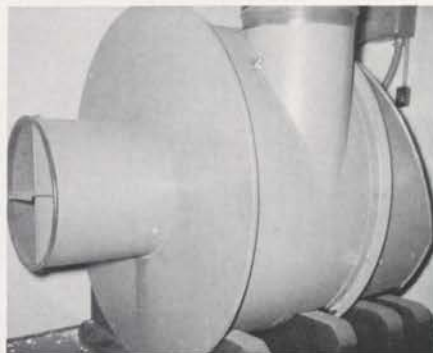
The same Kinetic blower reassembled. Note the flex tubing which conducts the pressurized air to the regulator. This blower powers a 3-rank Morton in the home of H. A. Sommer, North Highlands, California.

### Pointers on Changing Bearings

1. Wear your oldest clothes. Organ dirt washes off, blower dirt doesn't. You will also need at least two adjustable wrenches. It is best to gather all the wrenches you can, including a set of Allen wrenches and a set of socket wrenches of appropriate size ranges.
2. Get plenty of light on the work area.
3. Disconnect the blower power. There is usually a large switch in the blower room with a handle marked "On" and "Off." With this switch in the "Off" position, check by trying to start the organ as usual. To be sure, I also re-

move the fuses. It is most disconcerting to have someone start the organ when you are in the blower!

4. Disassemble the blower. The important thing here is to mark the parts as you take them off, with grease pencil or chalk, so you can get them back in the same order. If the fans have set screws which tighten against the shaft, be careful not to twist the fan as you are pulling it off; a quarter turn will sometimes lock the fan quite tightly because of burrs on the shaft.



INTAKE END OF SPENCER "ORGO-BLO." This monster generates air pressure which is regulated to 10" and 15" for the 4-16 Robert Morton organ in the Carl Greer Inn, Sacramento, Calif.

On some blowers you may be able to remove the motor and blower bearings without removing the fan wheels. On the Spencers I have worked on, the fans and partitions must come off. In general, think the procedure through before starting, and don't remove anything that doesn't have to come off.

5. If you are experienced in taking motors apart, you will find it easier to disassemble the motor and take only the shaft and the motor ends to the repair shop. If you are new at it, take no chances; haul the whole motor to the shop.

If the motor has ball bearings, be sure to clean the old grease out of motor ends before reassembling it. Larger Spencers (16 hp and up) have "thrust" type ball bearings which are quite expensive. These, however, may be replaced by more common types. Write to Spencer for replacement information.

If the motor has sleeve bearings, have them cleaned. Replace them if they are worn. And remember to hold the oil rings out of the way as you slide the shaft back into the bearings. Oil sleeve bearings only when motor is not running. If the motor base is part of the center section of the motor (so you can remove the ends of the motor while it remains mounted on the blower assembly), you may not have to remove wires from the motor or remove the motor from the blower.

*(Continued on Page 34)*

## LETTERS, continued

Musical snobbery, like any other form of snobbery is a sign of a lack of maturity. The need to dichotomize is a sign of an insecure, infantile mind.

Don't get the idea that I'm painting a black and ugly picture, or that I think these faults are universal. To the contrary, I attended a good example of interdisciplinary concertizing. In the middle of the northern Calif. chapter's Hi-Jinks last year, we got a chance to sit up in the choir stalls to hear Purvis work over the big Skinner at Grace Cathedral in Frisco. There was a big crowd and Mr. Purvis was well received to say the least. Richard Purvis is himself a fine example of what I'm yakking about with regard to broad tastes in organ music. Another example, George Wright now plays in church, you can bet he ain't playing no bump and grind music baby! Funny how the artists, the true artists, are themselves the most catholic in their tastes, and the least involved in controversies about these little divisions in our ranks. That might be because they are true musicians and if it's music and it's an organ, they dig it.

We should all only be like them maybe?

Yours Truly,  
B. W. Bartlett

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## "TRAVELIN' BOB" REPORTS

Mr. Editor:

While visiting Colorado this year I met Bob Castle at the Denver Paramount and listened to him play for over an hour. He plays intermissions at the theatre on Sunday evenings. He's an excellent organist, too. The instrument is a 20-rank Wurlitzer and Bob told me he had restored all but the Culcima which is too soft to be heard anyway. There is no piano, but it has a good Harp. Both the theatre and the building owner want the organ to be used, so Bob feels that it is relatively safe for the foreseeable future. I understand there is one other organ in a Denver theatre but that it's not playable at present.

One evening I had dinner at the Three Coins restaurant in the village of Louisville (near Boulder) where the 3-13 Wurlitzer from the Rochester, New York, Paramount is played by Dick Hull (he used to play it at the Paramount, too). This impressed me as a very nice installation and Hull is a wonderful performer. Very friendly, too. He plays several numbers in a row in the Don Baker way then takes a short break, then another group. He came to my table during one break for a visit and told me that he ordinarily keeps the volume low, realizing that not all present are organ fans. However, he opened it up for me on the next number and showed that the organ has plenty of power without being oppressively loud. Patronage is very good in this out-of-the-way location (several miles from the main highway).

Bob Wilson  
Yakima, Wash.



This 10 horsepower motor rotates the "Orgoblo" fan blades. Note the sleeve bearing and associated oil cup, also the oil cup at the other end of the motor shaft. Keeping them full saves burnouts.

## A FEW THOUGHTS ON BLOWERS

(Continued from Page 15)

May I reiterate, if you are not experienced in taking motors apart, either get a group of husky enthusiasts and move the motor intact to the repair shop or have a repairman take over the whole job. Before moving the motor, open the connection box on the side of the motor, unwind the insulating tape, mark the wires with tags, and unfasten them (do not cut them). If the motor has sleeve bearings, drain the oil. Be careful not to get oil on the motor's windings or on brushes (if any). Unfasten the motor from its mounting and move it to the floor, keeping the washers and spacers under each foot of the motor separate so they can be put back in the same positions. Lifting a motor requires at least two strong people, with a third person to keep track of the spacers, washers, nuts and bolts. Motors are heavier than they look, and by all means keep your back straight when lifting one! Otherwise, you can injure your back seriously. Do not lift from the end of the long motor shaft because, like your back, it may bend. Grab the shaft near the motor.

6. When work has been completed, remount the motor and reassemble the blower in reverse order of the way it came apart. Be sure to follow the instructions marked on the blower, such as "Align 'V' mark on fan with line on motor shaft," and "Be sure rotation is in this direction." Each fan wheel must be placed in the center of the space provided for it, so set the separating partition first, then the fan. Before applying power to the reassembled blower make certain that everything is free by turning the motor shaft a few rounds by hand.

The ideal time to change bearings is when the blower is dismantled for moving. And remember—blowers should

never be reassembled with worn bearings.

Now that your blower is purring smoothly, remove and bury those filthy clothes! Better yet—burn them. Happy motoring!

—Chris, Manitowoc, Wisc.

## An Organist Speaks . . .

(Continued from Page 14)

### GREAT

("SOLO" on a two manual organ)  
Add Great to Great 16' and 4' couplers.

Add Tibia unification at 5-1/2', 2-2/3', 2', and 1-3/5'. It is also advisable, if possible, to have other high end unification (flute, String, Diapason) for ensemble brilliance.

Eliminate Bourdon 16' Orch Bells - Sleight Bells and group Strings and Celestes on one tablet for each pitch at which they appear to make room for all 8' voices and the addition of these 16' voices as they apply: Eng. Posthorn 16', Trumpet 16', Tuba 16', Clarinet 16', Sax 16', Tibia 16', Vox 16'.

### GREAT SECOND TOUCH

Eliminate all but English Posthorn 16' and 8' on a two manual organ. If Posthorn is not available then Trumpet 16' and 8' may be substituted.

Add Solo to Great 16' and Solo to Great 8' 2nd Touch Couplers to a three manual organ.

### SOLO (3-manual organ)

Add 16' and 4' Solo to Solo Couplers.

Add Solo to Great 16' and Solo to Great 8' Couplers.

Add Vox 8' to Solo.

Add Tibia at 2-2/3' and 2' to Solo.

Add String Ensemble 8' (one tab to play all strings)

Eliminate all 16' stops (except Tibia) if necessary, to facilitate the above changes.

These changes will certainly add brightness, variety and ease of playing to your installation. They put the voices where they are needed by eliminating misplaced ones originally put there by "format" or the need to fill a stop rail.

The process isn't easy. It requires additional switches but the emergence of electronic switching has cut costs in that department.

The best time to perform the operation is before the installation when it's much easier to arouse the gumption to re-arrange the stop rail than after the organ is playing and such an operation would mean a shutdown.

But whenever it's done, the results are well worth the effort.

For further information about the John Seng Wurlitzer-style concert organ, see the BOMBARDE, volume II, No. 4 (Fall 1965).